

Claims

- [c1] 1. A front assembly in a heavy vehicle (1), which front assembly interacts with a forward portion of a longitudinal frame (10) comprised in the vehicle, and in which there is comprised an underrun protection, which in turn comprises a stiff, force-absorbing beam structure (5), the beam structure (5) being provided with at least a first fastening member (18) arranged to interact with at least one second fastening member (20) arranged at the front frame part of the vehicle (1), the first and the second fastening members being arranged, during assembly, to guide the beam structure (5) to a predetermined non-adjustable position on the frame essentially across the longitudinal direction of the frame (10), the beam structure arranged to support additional components at the vehicle front, such as footsteps (6), headlight units (7) and panels (8) at predetermined non-adjustable positions, with the beam structure and the components supported by it together forming a front module (3), the predetermined position of which causes an accurate positioning of the module relative to the rest of the front of the vehicle.

- [c2] 2. The front assembly as recited in claim 1, wherein the panels (8) comprise a bumper casing (8) that at least partially covers the beam structure (5).
- [c3] 3. The front assembly as recited in claim 1, wherein the front module in vehicles with larger ground clearance than the standard ground clearance of the vehicle type further comprises an extension beam structure (32) attached to the underside (31) of the beam structure (5) and which extends downwards.
- [c4] 4. The front assembly as recited in claim 1, wherein the first fastening member (18) comprises a male part (21) equipped with a handle (22) and a head (23) attached to it, said male part protruding essentially horizontally towards said second fastening member (19) with the cross-sectional area of the head (23) exceeding the cross-sectional area of handle (22) and with the head (23) exhibiting a rear flange surface (24) facing the handle (22); and said second fastening member (29) comprises a female part (27) exhibiting a first opening (28), the dimensions of which essentially correspond to the head (23) of the male part (21), and a second opening (29) the dimensions of which essentially correspond to the handle (22) of the male part (21), with the first opening (28) directly communicating with the second opening (29), and in which a contact surface (30) is defined

around the second opening (29), which contact surface (30) is arranged for contact against said rear flange surface (24) of the head (23) of the male part (21).

[c5] 5. The front assembly as recited in claim 1, wherein the second fastening member (20) comprises a male part (21) provided with a handle (22) and a head (23) attached to it, said male part protruding essentially horizontally towards said first fastening member (18), with the cross-sectional area of the head (23) exceeding the cross-sectional area of the handle (22), and with the head (23) exhibiting a rear flange surface (24) facing the handle (22); and said first fastening members (18) comprise a female part (27) exhibiting a first opening (28) the dimensions of which essentially correspond to the head (23) of the male part (21), and a second opening (29) the dimensions of which essentially correspond to the handle (22) of the male part (21) with the first opening (28) directly communicating with the second opening (29), and with a contact surface (30) being defined around the second opening (29) which contact surface (30) is arranged for contact against said rear flange surface (24) of the head (23) of the male part (21).

[c6] 6. The front assembly as recited in claim 4, wherein the first (28) and second (29) opening in the female part (27) together form an essentially keyhole formed opening.

- [c7] 7. The front assembly as recited in claim 4, wherein the male part (21) has an essentially circular cylindrical shape.
- [c8] 8. A method for assembling a front assembly of a heavy vehicle as recited in claim 1, wherein a supporting structure preferably consisting of a beam structure (5) intended to function as underrun protection is pre-assembled at fixed points, with components comprised in the front such as headlight units (7), footsteps (6) and panels (8, 16, 17) to form a front module (3), and in that the front module with the aid of the first and second fastening members (18, 20) are fixed to a fixed position, essentially across the vehicle (1) at the front part of the vehicle frame (10).
- [c9] 9. The method as recited in claim 8, wherein the pre-assemble front module (3) is assembled to the vehicle (1) by means of a first fastening member (18) belonging to the front module (3) is brought into contact with a second fastening member (20) fixed to the vehicle, following which form locking between said first and second fastening members (18, 20) is achieved by means of a male part (21) and a female part (27) by means of tightening a screw or bolt connection (19).